

Claims

- 1 1. A front-end loader for a percutaneous transluminal system for a prosthetic occluder,
2 comprising:
 - 3 a proximal portion comprising an expanded lumen; and
 - 4 a distal portion, comprising:
 - 5 a tube having a proximal end, a distal end, a lumen extending therethrough, and a
6 beveled end, said beveled end positioned at said distal end of said tube, wherein said
7 beveled end receives said prosthetic occluder.
- 1 2. The front-end loader of claim 1, wherein the beveled end is chamfered.
- 1 3. The front-end loader of claim 2, wherein the beveled end is chamfered around the perimeter
2 of the distal end of the tube.
- 1 4. The front-end loader of claim 1, wherein said expanded lumen in said proximal portion is
2 tapered.
- 1 5. The front-end loader of claim 4, wherein the tapered expanded lumen is conically shaped.
- 1 6. The front-end loader of claim 1, wherein said prosthetic occluder comprises an intracardiac
2 occluder.
- 1 7. The front-end loader of claim 6, wherein said occluder comprises an occluder for treating an
2 atrial septal defect.
- 1 8. The front-end loader of claim 6, wherein said occluder comprises an occluder for treating a
2 ventricular septal defect.
- 1 9. The front-end loader of claim 6, wherein said occluder comprises an occluder for treating
2 patent ductus arteriosus.
- 1 10. The front-end loader of claim 6, wherein said occluder comprises an occluder for treating
2 patent foramen ovale.
- 1 11. The front-end loader of claim 1, wherein said beveled end receives said prosthetic occluder
2 to withdraw said prosthetic occluder from a patient's body.
- 1 12. The front-end loader of claim 1, wherein said beveled end receives said prosthetic occluder
2 to deliver said prosthetic occluder into a patient's body.

1 13. The front-end loader of claim 1, wherein said beveled end receives said prosthetic occluder
2 through said distal end.

1 14. A front-end loader for a percutaneous transluminal system for a prosthetic occluder,
2 comprising:

3 a proximal portion comprising an expanded lumen; and

4 a distal portion, comprising:

5 a tube having a proximal end, a distal end, a lumen extending therethrough, and a
6 chamfered rim, said chamfered rim positioned at said distal end of said tube, wherein said
7 distal end receives said prosthetic occluder.

1 15. The front-end loader of claim 14, wherein the distal end is beveled.

1 16. The front-end loader of claim 14, wherein the chamfered rim is chamfered around the
2 perimeter of the distal end of the tube.

1 17. The front-end loader of claim 14, wherein said expanded lumen in said proximal portion is
2 tapered.

1 18. The front-end loader of claim 17, wherein the tapered expanded lumen is conically shaped.

1 19. The front-end loader of claim 14, wherein said prosthetic occluder comprises an intracardiac
2 occluder.

1 20. The front-end loader of claim 19, wherein said occluder comprises an occluder for treating
2 an atrial septal defect.

1 21. The front-end loader of claim 19, wherein said occluder comprises an occluder for treating a
2 ventricular septal defect.

1 22. The front-end loader of claim 19, wherein said occluder comprises an occluder for treating
2 patent ductus arteriosus.

1 23. The front-end loader of claim 19, wherein said occluder comprises an occluder for treating
2 patent foramen ovale.

1 24. The front-end loader of claim 14, wherein said distal end receives said prosthetic occluder to
2 withdraw said prosthetic occluder from a patient's body.

- 1 25. The front-end loader of claim 14, wherein said distal end receives said prosthetic occluder to
- 2 deliver said prosthetic occluder into a patient's body.

- 1 26. The front-end loader of claim 14, wherein said distal end receives said prosthetic occluder
- 2 through said distal end.

- 1 27. A method for delivering a collapsible prosthetic occluder to a patient, comprising:
 - 2 providing a front-end loader comprising:
 - 3 a proximal portion comprising an expanded lumen; and
 - 4 a distal portion, comprising:
 - 5 a tube having a proximal end, a distal end, a lumen extending
 - 6 therethrough, and a beveled end, said beveled end positioned at said distal end of
 - 7 said tube;
 - 8 receiving said prosthetic occluder in the lumen of said tube; and
 - 9 delivering said prosthetic occluder to the patient.

 - 1 28. The method of claim 27, further comprising:
 - 2 introducing said beveled end into a lumen of a portion of an introducer sheath for the
 - 3 prosthetic occluder and crossing a gland.

 - 1 29. A method for retrieving a collapsible prosthetic occluder from a patient, comprising:
 - 2 providing a front-end loader comprising:
 - 3 a proximal portion comprising an expanded lumen; and
 - 4 a distal portion, comprising:
 - 5 a tube having a proximal end, a distal end, a lumen extending
 - 6 therethrough, and a beveled end, said beveled end positioned at said distal end of
 - 7 said tube, wherein said beveled end is chamfered;
 - 8 receiving said prosthetic occluder in the lumen of said tube; and
 - 9 retrieving said prosthetic occluder from the patient.